

GENERIC · CHASSIS

C0023

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C0023

ABS Pump Motor Circuit High

C0023 means the antilock braking system (ABS) control module has detected an abnormally high voltage or current condition on the circuit that powers the ABS pump motor. The module commands the pump to run during an ABS event, monitors the motor feed circuit, and sets this code when the electrical load on that circuit exceeds the expected range.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Chassis	Generic (all makes)	High	Professional	Brakes, steering and suspension

Symptoms you may notice

- The ABS warning light is illuminated on the instrument cluster, often with no other noticeable change in braking feel.
- The traction control or stability control warning light may also be on because those systems share the ABS pump.
- The ABS pump may not run during a hard stop, so the wheels can lock and the pedal may feel less responsive in a panic stop.
- A blown ABS pump motor fuse or a tripped circuit breaker may be found during inspection.
- In some vehicles the pump motor may run continuously or stay energized after the key is turned off, draining the battery.
- Often no symptoms besides the warning light, especially if the high-current condition is intermittent.

Common causes, most likely first

- A short to voltage or a short to ground in the pump motor feed or ground wiring, often from chafed insulation or a pinched harness.
- A seized or internally shorted ABS pump motor that draws excessive current when commanded on.
- Corroded, loose, or damaged pump motor connector terminals that create resistance and heat.
- A faulty ABS control module with an internal driver or current-sensing circuit failure.
- A damaged pump motor relay that stays closed or has welded contacts, keeping the motor powered.
- Water intrusion into the ABS pump motor or connector, common on vehicles with underbody splash exposure.
- An incorrect or undersized fuse or a poor ground connection at the chassis or pump body.



How to diagnose and fix it

- 1 Scan all modules for ABS and related codes, record freeze-frame data, and clear the code to see whether it returns immediately or only under pump activation.
- 2 Inspect the ABS pump motor fuse, relay, and ground connections for blown elements, corrosion, or loose fasteners.
- 3 Disconnect the pump motor connector and check for water, corrosion, or backed-out terminals, then measure resistance across the motor terminals.
- 4 With the pump commanded on by a scan tool, measure voltage drop on the feed and ground circuits to locate excessive resistance or a short.
- 5 Wiggle-test the harness while monitoring pump motor current or voltage to catch intermittent wiring faults.
- 6 If wiring and connectors are good, substitute a known-good relay and retest before condemning the pump motor or control module.
- 7 Replace the failed pump motor, relay, or control module as indicated, then clear codes and verify the pump runs and the ABS light stays off during a road test.

What a high pump motor circuit really means

- A high-current code does not automatically mean the pump motor is bad; a shorted harness or a stuck relay can produce the same excessive current reading and is far cheaper to fix.
- Technicians often replace the ABS pump assembly when the real fault is a corroded ground strap or a chafed wire behind the inner fender, so always voltage-drop test the circuit before parts swapping.
- Some vehicles set C0023 only when the pump is commanded during an ABS event, so a static key-on test may show no fault and the code can appear intermittent.
- A weak battery or charging system that produces low voltage can cause the pump motor to draw higher current, so check battery and charging voltage before diagnosing the ABS circuit.
- The ABS control module may store C0023 alongside wheel speed sensor codes if the pump is commanded repeatedly during a sensor fault, so address the root cause rather than the pump alone.

Can I keep driving with C0023?

Because the ABS pump may not activate during an emergency stop, the vehicle can lose antilock braking and stability control assistance, so keep driving to a minimum and avoid hard braking or slippery conditions until the fault is repaired.



Tools that help

- OBD-II scan tool with ABS and bidirectional pump activation capability
- Digital multimeter with voltage drop and current measurement functions
- Fuse puller and test light
- Wire piercing probes and back-probe kit
- Manufacturer or equivalent wiring diagram for the ABS pump circuit
- Relay puller and known-good replacement relay

Reading C0023

C	Chassis: brakes, steering and suspension.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
0	Brakes, steering and suspension.
23	The exact fault within that area.

Often seen with

C0020 ABS Pump Motor Circuit · **C0021** ABS Pump Motor Circuit Range/Performance · **C0022** ABS Pump Motor Circuit Low · **C0035** Left Front Wheel Speed Sensor Circuit Range/Performance · **C0040** Left Rear Wheel Speed Sensor Circuit

See it working

Watch the animated explainer [How ABS Works: Anti-Lock Brakes in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/c0023/>

